

REMARKS

A reference to the parent applications to which domestic priority is claimed has been added to the first line of the application as required by 37 C.F.R. §1.78.

As permitted by 37 C.F.R. §1.63(d)(1)(i-iv) and MPEP §201.06(c), Applicant has filed herewith a copy of the original Declaration and has filed herewith a specification and drawings that do not contain any subject matter that would have been new matter in the prior application. The accompanying specification differs from the original specification for parent case Serial No. 09/798,788 in the following way:

1) New claims have been substituted for the originally filed claims of application Serial No. 09/798,788. Similar claims to the new claims were previously examined in the parent application as claims 24-48 and 65-66. Claims 24-48 and 66 were rejected in the parent application, and the Examiner objected to claim 65 in the parent application.

Applicant's new specification and drawings are provided to take advantage of the provisional rights potentially available to Applicant under 35 U.S.C. §154(d). Applicant submits that no new matter has been added as the new claims are supported by the specification of the parent and grandparent applications.

In the Advisory Action, the Examiner alleged that Okamura teaches all of the limitations cited in parent claims 24 and 37 (now claims 1 and 14) in figures 1, 3 and 4, column 11, line 62-column 12, line 67, column 14, lines 35-58 and column 16, lines 47-55. The (c) and (iii) limitations from the parent claims 24 and 37, respectively, have been removed from claims 1 and 14. New claims 28 and 29 correspond to parent claims 24 and 37 with the (c) and (iii) limitation and without the (a) and (b), and (i) and (ii) limitations, respectively.

Independent claim 1 requires the passenger detection system to be responsive to the moisture sensor in one of three ways: (a) altering a measured value of the passenger detection system as a function of a moisture level and (b) selecting a table for the passenger detection

system as a function of the moisture level. Similarly, independent claim 14 requires determining a presence of the passenger in the passenger seating area as a function of the measured moisture, the function being at least one of: (i) altering a measured value for the determination as a function of the measured moisture and (ii) selecting a table for the determination as a function of the measured moisture. Okamura and Lu do not suggest these ways or functions of claims 1 and 14.

Lu provides for a moisture sensor, such as used for detecting precipitation to close windows or roofs (col. 1, lines 8-15). Lu does not provide for interaction between a moisture sensor and passenger detection or determination. Lu does not suggest the ways (a) or (b) of claim 1 or the functions (i) or (ii) of claim 14.

Okamura does not suggest any of the claimed functions or ways of determining or responding to moisture. Instead, the detection of “wet” is used by Okamura as an end result, such as clearly indicated by the finality of step S106 of Figure 3. A wet detection is used as a vacant seat conclusion with no further steps. Okamura uses two sensors to make conclusions or determine states of occupancy (col. 12, lines 12-17). A person or object is not on the seat if both sensors do not detect something (col. 12, lines 18-28). Where the pressure sensor does not detect something but the dielectric sensor does, the seat is determined as wet, and thus vacant (col. 12, lines 28-35; see Figure 3, step S106). Where the pressure sensor detects something, the seat is determined as a child seat, luggage, non-dielectric load or person based on the detection of the dielectric sensor (col. 12, lines 36-67). Okamura detects moisture or does not detect moisture as one of the at least 4 possible states. The detection of moisture provides its own end result or conclusion as a vacant seat (see step 106 of Figure 3). The claimed functions and ways require a reaction to a determination of moisture. For Okamura, moisture detection is its own end result. Okamura does not use the detection of moisture to then alter a measured value or to select a table. Okamura is done with a given detection once the seat is determined as wet. Okamura does not suggest using the moisture sensor for a further process, such as altering a measured value or selecting a table as claimed in claims 1 and 14.

For example, Okamura senses wet and concludes that the seat is vacant. The claimed

system may still be used to determine the relative size or position of an occupant even where wet is sensed. Sensing “wet” is used to alter the determination by altering a measured value or selecting a table. The size or position may be greater or less by accounting for the moisture effect on the passenger detection system. Rather than concluding that “wet” is a vacant seat, the “wet” is used for a further function or way.

The dependent claims 2-13 and 15-26 depend on the independent claims discussed above, so are allowable for the same reasons. Further limitations of the dependent claims distinguish from both of Okamura and Lu. For example, Okamura and Lu do not suggest: altering a measured signal as a function of moisture or humidity as claimed in claims 10 and 22; selecting a table for detection of a passenger as a function of moisture or humidity as claimed in claims 11 and 23; and generating a fault condition or sending a fault signal as claimed in claims 12 and 25. As further examples, the combination of Lu and Okamura does not suggest: a moisture sensor with two conductors connected by absorbent material as claimed in claim 5 (the cited material 41 is not absorbent, but is plastic or “moisture impervious”); a moisture sensor with circuitry to measure resistance between two conductors as claimed in claims 8 (Lu teaches away from using resistance (Col. 1, lines 15-26), so a person of ordinary skill would not have used the resistance teaching with Okamura); and applying oscillating signals at two respective frequencies as claimed in claim 21 (Lu shows two signals at a same frequency but possibly different phases (Col. 3, lines 69 - Col. 4, line 2)).

Independent claim 28 requires the passenger detection system to be responsive by generating a fault condition of the passenger detection system. Similarly, independent claim 29 requires determining a presence of the passenger in the passenger seating area as a function of the measured moisture, the function being generating a fault condition as a function of the measured moisture. Okamura and Lu do not suggest these ways or functions.

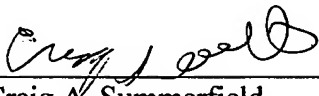
The Examiner did not cite to a specific disclosure of Okamura of identifying a fault. Okamura provides for two types of sensors to distinguish between a wet seat and a non-

dielectric car seat. Determining that the seat is wet is not a fault condition. The dielectric sensor makes a detection if the seat is wet. However, the other sensor (i.e., the pressure sensor) is provided to complete the determination of just wet verses a child seat. The outputs of the two sensors are used to make the determination, so no fault signal or condition is needed.

Regarding claim 27 (parent claim 66), the Examiner has not previously considered the "a passenger detection system having circuitry and at least one electrode" language.

Applicants respectfully submit that all of the pending claims are in condition for allowance and seeks early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,



Craig A. Summerfield
Registration No. 37,947
Attorney for Applicant

BRINKS HOFER
GILSON & LIONE
P.O. Box 10395
Chicago, Illinois 60610
(312) 321-4200

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